

INFORMATION STORAGE CORPORATION
100 CARTER STREET
BERLIN, MASS. 01503
P.O. BOX 27 TEL. 838-7397

COMPUTER DESIGN

T NELSON, SYS CONSLT

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BOX 3

SCHOOLEYS MTN NJ 07870

FIRST CLASS MAIL

DIGITAL INFORMATION STORAGE CORPORATION

100 Carter Street

Berlin, Mass. 01503

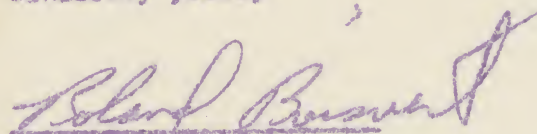
Gentlemen:

Enclosed is the information you requested. Our representative in your area is:

Instrumentation Sales, Inc. Tel. 201-445-5210
P.O. Box 403
170 E. Ridgewood Avenue
Ridgewood, N.J. 07451

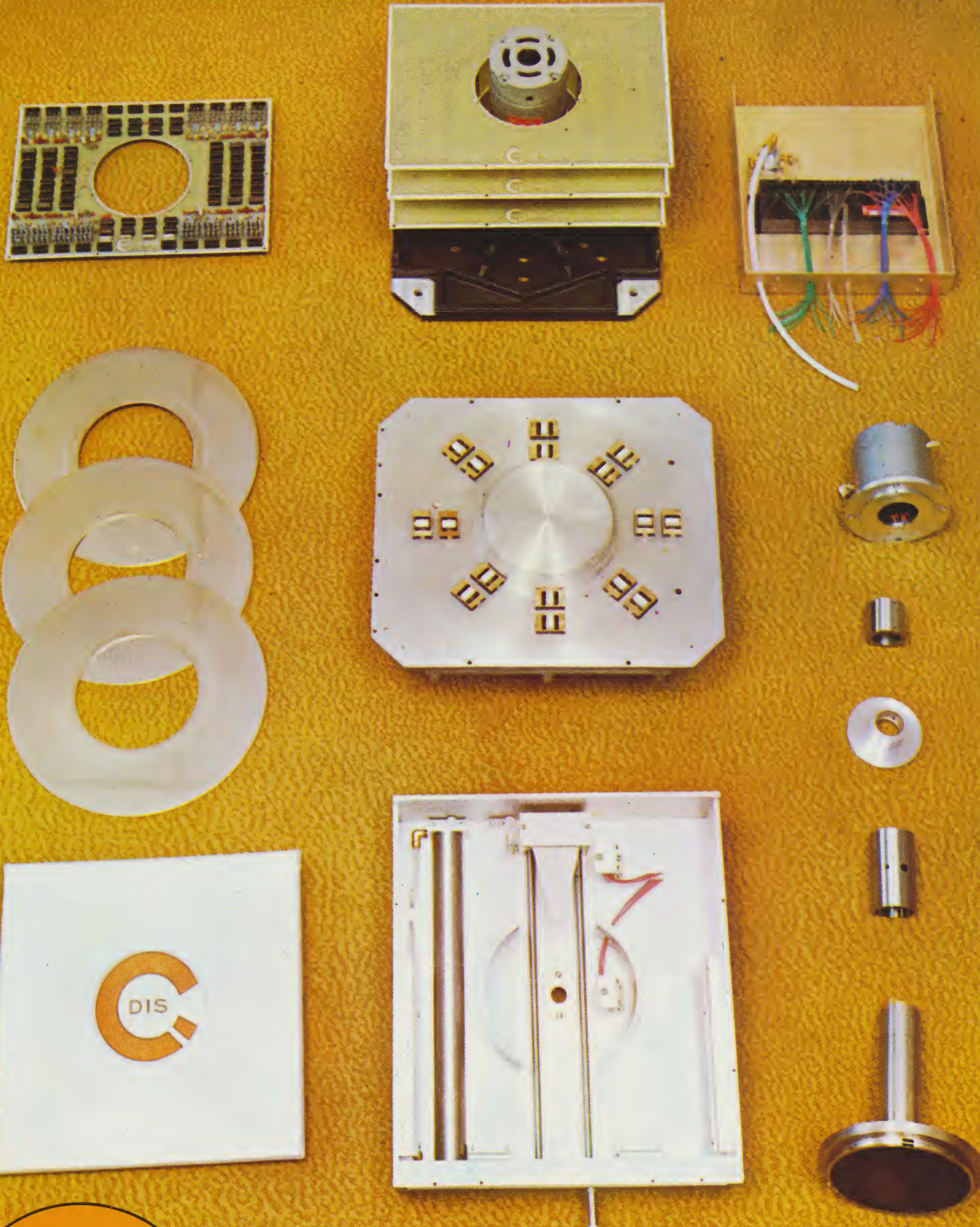
who will be in touch with you in the near future.

Sincerely yours,


Roland Boilevert
President

RB:EBS
Enc.

Please Note; A feature article on the DDR-1 is in the
October 27th issue of ELECTRONICS.



DIGITAL INFORMATION STORAGE CORPORATION

100 CARTER STREET / P.O. BOX 27 / BERLIN, MASSACHUSETTS 01503 / TEL. 617-368-8544

An affiliate of WANG Laboratories, Inc.

**D.I.S.C. — DEDICATED TO FILLING THE NEED
FOR INEXPENSIVE COMPUTER-PERIPHERAL
INFORMATION STORAGE & HANDLING SYSTEMS**

Peripheral equipment is rapidly becoming the focal point of the computer industry. Market analysts predict a faster rate of growth for peripherals than mini computers and many leaders in the computer industry point out that any significant new contributions to the price/performance ratio of a system will come from the peripherals manufacturers.

D.I.S.C. was founded in response to the challenge of the industry. Our goals have been set by the industry requirement and we have set forth to become a major supplier of digital information storage and generation devices.

By innovation and applied advanced state-of-the-art technology, D.I.S.C. products bring reliability, performance, and economy to computer systems and related equipment.

DISC-O-DECS

DIRECTORS/EXECUTIVE STAFF

An Wang, Chairman	President, Wang Laboratories, Inc.
Ned Chang	Vice-President, Wang Laboratories, Inc.
Charles E. Goodhue III	Partner, Goodwin Procter & Hoar
Roland Boisvert	President, Digital Information Storage Corporation
Stephen A. Lambert	Vice-President, Digital Information Storage Corporation
Frederick J. Robbins	Clerk. Partner, Goodwin Procter & Hoar





DISC-O-TECS

The Technical Staff has contributed to the design of previous disk memory systems which have won industry-wide acceptance. Their latest design culminates their experience and know-how into the most advanced disk memory product available.

The DDR-1 Digital Disk Recorder has design innovations which combine the unique characteristic of the disk pack—CHANGEABILITY, and the desirable characteristic of the head-per-track disk unit — ACCESS TIME. Advanced state-of-the-art technology in mechanics, fluidics, and electronics has been employed to bring reliability and economy to the DDR-1.



DISC-O-PROS

The Production Staff has set high standards which are enforced by rigorous Quality Control inspection and test procedures. These Q.C. procedures insure that the advanced state-of-the-art technology meets the required specifications. As a result, automated testing is utilized from component to sub-assembly to final assembly.

Computerized final acceptance testing is utilized to insure proper operation at the customer's facility. The acceptance test is one agreed upon by D.I.S.C. and the customer; it provides an inter-factory standard for both companies.

THE FACILITIES

Acceptance Test Area



Checkout of Disk Picker and Fluidics



Aligning Heads with Optical Disk.



Clean Room Assembly and Inspection.



Engineering and Drafting

THE DDR-1 DIGITAL DISK RECORDER



The DDR-1 Digital Disk Recorder is a low-cost random access bulk storage device and controller for small/medium scale computers. The interface can be designed to operate through a data channel for single cycle or normal I/O for multiple cycle operation.

The DDR-1 is capable of 32,768 bytes (8 bits) to 524,288 bytes of data storage, and is economically expandable to 2,097,152 bytes of fast access storage using expander type recorders.

For slower access, the interchangeable disk (DISKlosure) provides infinite storage. The DISKlosure has a write lockout feature to prevent writing on the entire disk.

Data is recorded on a single disk surface by read/write heads which are in a permanent or fixed position.

The changeable nickel-cobalt plated disk is driven by a hysteresis synchronous motor. The shaft is supported by an air bearing spindle, and is raised and lowered fluidically to load and unload the disk. When starting or stopping the digital disk recorder, there is no contact between the heads and the disk.

The disk hub, shaft, air bearing spindle, motor, read/write heads, and all electronics are assembled in the upper housing casting which is shock-mounted in a free-standing cabinet. The unit is also available in a 19" rack-mounted configuration.

SPECIFICATIONS

Storage Capacity	DDR-1 32,768 to 524,288 bytes DER-1 32,768 to 524,288 bytes. Maximum capacity of 2,097,152 bytes may be achieved by adding up to 3 Digital Expander Recorders (DER). DDR-2 and DER-2 are limited to 262,144 bytes per unit.
Data Transfer Rate	60 cycle power: 16 μ sec per word 50 cycle power: 20 μ sec per word
Average Access Time: DDR-1 DDR-2	16.67 msec 8.33 msec 20 msec 10 msec
Addressing Scheme	Random or absolute addressing from 0 to 262,144 words with variable block sizes from 1 to 2,048 words. DDR-2 has 131,072 words with variable block sizes from 1 to 1,024 words.
Data Assembly	Read/Write on disk is serial with external transfer parallel by word. Other configurations are available on request.
Electronics	TTL Integrated Circuits
Recording Method	NRZI 20-1 code
Operating Environment	Maximum Temperature 50 to 120°F Recommended Temperature 70 to 85°F Relative Humidity 20 to 80%
Atmosphere	Non-Corrosive
Heat Dissipation	3,000 watts
Power Requirements	118v, 50 or 60 cycle, single phase, AC
Mechanical Dimensions	Free Standing: 42"H, 23"W, 27"D Rack Mount: 26 $\frac{1}{4}$ "H, 19"W, 22"D
Weight	150 lbs. 125 lbs.
Words Per Track	DDR-1: 2,048 DDR-2: 1,024
Recording Density	1,750 bits per inch 875 bits per inch
Power Supply	DC power is sequenced to perform memory protect for the electronics during power on-off and power interruptions. A sensing circuit signals the computer of power fail. The computer has 100 milli-seconds to complete operations with the disk recorder before shutdown.

DOCUMENTATION

An instruction manual is available with detailed descriptions of installation, operation, preventive maintenance, troubleshooting, timing charts, and spare parts.

Disk-Test is a set of diagnostic programs keyed to the instruction manual to test proper operation of the DDR-1 Digital Disk Recorder.

Programmer's handbook is available which has the necessary information for the systems programmer to write disk-based compilers, assemblers, etc.

1,800-RPM MODELS

16.67 msec Average Access Time

DDR-1 Digital Disk Recorder	DER-1 Digital Disk Expander	No. of Tracks	Formatted Data Storage Bytes
DDR-1-00-32	DER-1-00-32	8	32,768
DDR-1-00-65	DER-1-00-65	16	65,536
DDR-1-00-131	DER-1-00-131	32	131,072
DDR-1-00-262	DER-1-00-262	64	262,144
DDR-1-00-524	DER-1-00-524	128	524,288

3,600-RPM MODELS

8.33 msec Average Access Time

DDR-2 Digital Disk Recorder	DER-2 Digital Disk Expander	No. of Tracks	Formatted Data Storage Bytes
DDR-2-00-32	DER-2-00-32	16	32,768
DDR-2-00-65	DER-2-00-65	32	65,536
DDR-2-00-131	DER-2-00-131	64	131,072
DDR-2-00-262	DER-2-00-262	128	262,144

OPTIONS

- | | |
|--|--|
| <ul style="list-style-type: none"> ● Anticipation Logic ● DISKlosure 1 ● Format Writer ● Program Write Lock (8 tracks per switch) ● Program Read Lock (8 tracks per switch) | <ul style="list-style-type: none"> ● IC Sockets ● DISKlosure 2 ● Indicator Panel ● Manual Write Lock (8 tracks per switch) ● Manual Read Lock (8 tracks per switch) |
|--|--|

CUSTOMER SERVICES

The Customer Service Group consists of applications engineers, programmers, and field service engineers. Custom interface design services are available at moderate cost. The Applications Engineering Group will design the interface to the computer of your choice. The Programming Staff will write diagnostics keyed to the instruction manual to allow on-line troubleshooting.

In most cases, the customer is required to send his computer to D.I.S.C. 30 days prior to acceptance. The interface and diagnostics will be checked out and the customer may run an acceptance test at D.I.S.C. prior to shipment.

Other software services such as disk-based compilers, monitors, and assemblers are available on request.



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